

## **VERSION WITH MARKINGS TO SHOW CHANGES MADE**

### **In the specification:**

**I. In the Brief Description of the Figures, after the first paragraph on page 66, lines 1-3, please add the following paragraphs:**

--FIG. 31 is an exemplary user interface U100 in which a buyer enters a description of the product or service she wants to purchase.

FIG. 32 is an exemplary user interface U200 that displays research or advice requested by a buyer.

FIG. 33 is an exemplary user interface U300 that displays a buyer's priorities for product or service features.

FIG. 34 is an exemplary user interface U310 that lets a buyer choose the level of expert assistance provided to the buyer.

FIG. 35 is an exemplary user interface U400 that lets a buyer constrain her search.

FIG. 36 is another exemplary user interface U410 that lets a buyer constrain her search.

FIG. 37 is an exemplary user interface U500 that lets a buyer create an automated bot.

FIG. 38 is an exemplary user interface U600 that displays initial seller offers to a buyer.

FIG. 39 is an exemplary user interface **U700** that displays value scores for seller offers.

FIG. 40 is an exemplary user interface **U800** with a buyer registration form.

FIG. 41 is an exemplary user interface **U810** that lets a buyer limit the number of seller offers displayed to the buyer.

FIG. 42 is an exemplary user interface **U900** that displays a list of final adjusted offers along with a score for each offer.

FIG. 43 is an exemplary user interface **U910** that includes value added products or services or other offers to enhance the overall offering to the buyer.

FIG. 44 is an exemplary user interface **U1000** that lets a buyer execute a transaction.

FIG. 45 is an exemplary user interface **U1100** that shows an adjusted offer evaluated with respect to a buyer's priorities.

FIG. 46 is an exemplary user interface **U1200** that displays the results of a suggestion search.

FIG. 47 is an exemplary user interface **U1300** that lets a buyer access information related to the buyer that is stored in a database.

FIG. 48 is an exemplary user interface **U1310** that displays an archived record of a buyer's transactions.

FIG. 49 is an exemplary user interface **U1320** that shows a report of a rewards program for a buyer.

FIG. 50 is an exemplary user interface **U2000** that provides an overview to a seller, with links to sections discussing the rights and responsibilities accepted by the seller.

FIG. 51 is an exemplary user interface **U2100** that illustrates possible types of affiliation.

FIG. 52 is an exemplary user interface **U2200** that summarizes exemplary types of information available under each type of affiliation.

FIG. 53 is an exemplary user interface **U2300** for specifying a seller's business rules.

FIG. 54 is an exemplary user interface **U2400** for specifying a seller's loyalty program.

FIG. 55 is an exemplary user interface **U3000** that shows information about an anonymous buyer that may be seen by a seller.

FIG. 56 is another exemplary user interface **U3100** that shows information about an anonymous buyer that may be seen by a seller.

FIG. 57 is an exemplary user interface **U3200** that shows records of posted offers that may be seen by a seller.

FIG. 58 is an exemplary user interface **U3400** that shows records of adjusted offers that may be seen by a seller.

FIG. 59 is an exemplary user interface **U3500** that displays the terms of an offer eventually accepted by a buyer.

FIG. 60 is an exemplary user interface U3600 that displays aggregate information about and analysis of auctions occurring during a certain time interval. --

**II. In the Detailed Description, please delete the paragraph beginning on page 75, line 19, and all successive paragraphs through page 96, line 7, and replace the deleted paragraphs with the following replacement paragraphs:**

At step 100 in FIG. 24, the buyer creates an RFO 10. In a preferred embodiment, video monitor A405 of buyer interface A400 displays a form similar to U100 (FIG. 31). In the form U100 (FIG. 31), a buyer enters a description of the product or service she wants to purchase, the description preferably being made in natural language. The description may include the type of product, requested features, warranty period, financing needs, delivery preference, and any other attribute the buyer wishes to include. The description, however, can be also very general. For example, the buyer may specify that she is looking for products enabling her to watch movies or for products enabling her to store food, rather than specifying particular items like VCRs and DVD players or refrigerators and kitchen cabinets, respectively. The description is received by buyer web server A500, which passes it to natural language interpreter A1210, embedded within core network A1200, to convert it into a format that shopping engine A1230 can later process. In another embodiment, the buyer selects the product category and features from a pre-defined on-screen or pull down menu, which may be hierarchically structured.

At step 150, the buyer decides whether or not she wants to request information or advice on a product or category of products. This may be done, for example, by clicking on the “learn” button in form U100 (FIG. 31). In another implementation, information is displayed automatically, depending on the vagueness of the buyer’s description. Descriptions that do not include a precise specification of a product or service, but only an area of interest, are treated to suggest the buyer needs to be informed about products or services in that area. In yet another implementation, the buyer may actually begin with

step 150, and proceed to step 100 only after having been educated about products fitting her needs.

At step 170, video monitor A405 displays requested research or advice, through a form similar to U200 (FIG. 32). The research or advice is supplied to buyer interface A400 by third party data server A1280, through buyer web server A500. The information supplied based on the research request can vary in its complexity. For example, without limitation, the information can be as simple as an article explaining the available features of new products and the differences among them or as detailed as a table summary with feature-by-feature product comparisons like those often shown in consumer magazines (e.g., Consumer Reports). Advice can range from a mere recommendation of a brand name, to a full stipulation of product's essential features, or to summary statistics showing the popularity of various products among users of the present invention.

At step 200, the buyer can optionally delimit the scope of seller search, through a form such as U400 (FIG. 35) or U410 (FIG. 36), which may be accessed by selecting the "look only" button on form U100 (FIG. 31). A wide variety of constraints can be placed on the search. For example, the buyer can limit eligible retailers to only those within a local geographical area, state, or country. She can also exclude retailers from a particular geographical area, e.g. "everything but California". Another limit may be imposed by specifying the highest price the buyer is willing to pay, or the shortest period of warranty service. The buyer can also insist on including in the search only those retailers that were ever rated by reputable agencies, or reviewed by major magazines, or earned a high reputation from other buyers, possibly with similar demographic characteristics. The buyer's constraints are stored in the Buyer Database Server A1220. In an alternative embodiment, step 200 may be omitted. In yet another alternative embodiment, step 200 can be embedded after step 300.

At step 250 the buyer may choose to proceed directly to the specification of her preferences and the actual auction, both of which are described later in this section. This may be done by clicking on the “go!” button in form **U100** (FIG. 31), form **U400** (FIG. 35), or form **U410** (FIG. 36). The choice is for convenience to repeat buyers, who are familiar with the interface and aware of the time saved by using this shortcut. In another embodiment of the system, it need not be implemented. By clicking “my choices” in form **U410** (FIG. 36) in buyer interface **A400**, the buyer does not proceed directly to the auction, which makes the present invention comparable in “look and feel” to current Internet shopping engines, thereby lowering the switching costs to users.

At step 300, shopping engine server **A1230** queries product qualifier database server **A1270**, and retrieves offers that satisfy most or all of the criteria specified in RFO 10. The results of the search, initial offers 40, are passed to buyer interface **A400**, where they are displayed in form **U600** (FIG. 38). Sellers offers may either be precompiled and stored on product qualifier database server **A1270**, or server **A1230** may request them and compile them on the fly from seller web server **A1000**, direct database access method server **A800**, or HTML data interface method server **A600**.

The buyer may sort returned initial posted offers 40 in **U600** (FIG. 38) by price, delivery time, store distance, seller name, manufacturer name, model number, etc., by clicking on the appropriate buttons. In another embodiment, the posted offers could be sorted by a score that is automatically imputed to each offer, as described in greater detail in step 380.

Optionally, the system could, at this stage, enrich the list of initial offers by a list or browser window displaying complementary goods or services. Complementary or substitution products may, without limitation, be identified by analysis of buying habits of consumers or by the application of a collaborative filter to the buyer’s request. In

other embodiments, similar suggestions could be made, without limitation, at steps 380, 1300, 1620, or 1900.

At step 350 the buyer can revise her RFO 10, by displaying the form U100 (FIG. 31) (or a similar form) again. This helps in situations in which RFO 10 was stipulated too narrowly, with shopping engine A1230 returning only a few or no initial offers 40, or too broadly, when hundreds of offers 40 were returned U600 (FIG. 38). Alternatively, this step can be omitted, leaving buyers to use other methods to return to step 100, such as pressing the web browser's "back" button.

At step 370, the buyer asks for a recommendation from among the initial offers 40, for instance, by clicking on the "make a recommendation" button in form U600 (FIG. 38). Alternatively, the recommendation may be generated automatically, without the buyer's prompt, when the posted offers are initially displayed.

At step 380, the recommendation is displayed by buyer interface A400 in a suitable form. A possible form is shown in U700 (FIG. 39), wherein a numerical score is calculated for each initial offer 40 and offers are sorted in descending order. Such a score could, for example, be based in part on the ranking of the product by Consumer Report and/or other magazines, or it could be based in part on its popularity among other buyers, as determined from records of purchases.

At step 400 buyer chooses to proceed with an auction or to make an immediate transaction. In one embodiment, buyers conducting immediate transactions (i.e., not using the auction component of the present invention) do not need to identify themselves because they transfer to the seller's web site to conclude the transaction, while buyers requesting adjusted offers 40 must be registered. In alternative embodiments, all buyers may be required to conclude every transaction in-situ, thus requiring identification from all of them. In yet another embodiment, all transactions may be concluded directly with

the seller, for example at his website, thus requiring no registration from any buyer at the Auctioneer site.

At step 500, the System checks whether the buyer has registered with buyer web server A500 before. If not, a standard registration form U800 (FIG. 40) is displayed on buyer interface video monitor A405, in which the buyer identifies herself. This step can also be automated, for example by using browser cookies, thus demanding no action on the buyer's part.

In the present embodiment, registration and identification are used to create and invoke buyer's profile, stored within buyer database server A1220. A simplified version of the system may not require step 500. Instead, buyers could re-enter information concerning their priorities every time they use the simplified system.

At step 600, the buyer completes a registration process. Buyer web server A500 instructs buyer database server A1220 to open a new "account", and the buyer sees, for example, a form such as U1300 (FIG. 47) on her monitor A405. The buyer or her proxy enters information about the buyer which can include, without limitation, basic personal demographic information, billing and shipping addresses, and credit card information, which are stored in buyer database A1220. The buyer's account information is preferably accessible to the buyer from any user interface so that it can be updated or modified by the buyer at any time.

Form U1300 (FIG. 47) makes accessible other forms, like U1310 (FIG. 48), U1320 (FIG. 49), U300 (FIG. 33), or U310 (FIG. 34). Form U1310 (FIG. 48) displays an example of buyer's archive record, showing all transactions that the buyer made within the system. Form U1320 (FIG. 49) shows a report of a rewards program. Sellers may offer benefits in terms of a reward program to the buyer, as part of their bidding strategy

and/or in exchange for information about the buyer. Forms **U300** (FIG. 33) and **U310** (FIG. 34) deal with the buyer's priorities and are discussed later in this section.

At step **700**, the buyer chooses whether to create a new set of priorities **20** or to use her priorities **20** stored in her account on buyer database server **A1220**. For example, buyers who frequently purchase the same or similar goods may benefit from using their stored priorities **20**, which had already been optimized. At step **800**, buyer web server **A500** contacts buyer database **A1220** to recover stored priorities **20**. They are, in turn, passed to buyer interface **A400**, and displayed in a form such as **U300** (FIG. 33). The sliders in form **U300** (FIG. 33), which correspond to the buyer's priorities for product or service features, can assume their positions from the last transaction, or their positions when last stored in the buyer's account.

At step **1000**, buyer's approval of the recovered priorities **20** is sought. In form **U300** (FIG. 33), the priorities **20** may be approved by clicking on the "go!" button. At step **1100**, the buyer modifies recovered priorities **20**. This modification can be done in a wide variety of ways. For example, the modification can be made by adjusting the sliders in an exemplary form **U300** (FIG. 33). It can also be made with the aid of an expert system, as illustrated by the "decide for me" button on form **U310** (FIG. 34). The expert system may run on buyer database server **A1220**, or any other server within core network **A1200**, or be dedicated to its own server. The expert system may, for instance, analyze the buyer's transaction record and infer the most likely priorities **20** that would have generated such a record. It may also base its suggestion on the average or median priorities **20** of a group of buyers with similar demographic characteristics.

At step **900**, the buyer creates a new set of priorities **20** by moving sliders within form **U300** (FIG. 33). Sliders are just one example of the many ways that could be used to enable a buyer to set her priorities. Other methods of setting preferences are well

known to those of ordinary skill in the art and need not be described in detail here. Optionally, expert system aid may be available at step 900.

At step 1150, buyer instructs buyer web server A500 to store the new or modified priorities 20 in her account within buyer database A1220. The actual storing of priorities 20 is done in step 1175.

At step 1180, the buyer can optionally put restrictions on displayed auction results. For instance, as shown in an exemplary form U810 (FIG. 41), the buyer can limit the number of adjusted offers 50 to be displayed, or provide a cut-off point for adjusted offers 50. Buyer may also be reminded at this step of the restrictions created in step 200, in forms U400 (FIG. 35) and U410 (FIG. 36). In another embodiment, step 1180 may be omitted.

At step 1200, auction engine server A1250 runs a buyer's auction. The detailed description of the auction process is provided later below, using FIG. 28 with steps 1210 through 1280.

In certain cases, as in U910 (FIG. 43), utilizing A1290, it may be beneficial for the Auctioneer (the buyer's auction service provider) to attach value added products or services or other offers which may be combined with seller offers to enhance the overall offering to the buyer. This may also give the perception to the buyer that all offers are adjusted whether or not they are from affiliated sellers.

At step 1300, a list of final adjusted offers 50, with their scores, is returned to the buyer web server A500 by auction engine server A1250. It is passed to buyer interface A400, through an exemplary form U900 (FIG. 42). The results may be sorted in a wide

variety of ways, including without limitation, by the score each adjusted offer **50** earned, by price, or by model number.

At step **1400** buyer determines whether to proceed or to modify her priorities **20**. For instance, by clicking on the “adjust my priorities” button in form **U900** (FIG. 42), the buyer returns to step **700**. The loop gives the buyer a quick way to learn how different sets of priorities **20** affect the resulting adjusted offers **50**. Step **1400** is not essential, other embodiments need not contain it.

At step **1450**, buyer may revise her RFO **10**. Revision is accessible, for example, by pressing the “I want to .. .” button in form **U900** (FIG. 42).

At step **1460**, buyer can choose to employ an automated bot. The bot enables the buyer to automate recurring transactions. It can alert the buyer when the transactions are supposed to be undertaken and/or it can enable the buyer to search for buyer-specified offers that are unavailable at the present time, but which are likely to appear in the future. The bot may run on buyer web server **A500**, however, it can also run on a dedicated server (not displayed) within core network **A1200**. The choice of using an automated bot can also be made available to the buyer at other points in the process.

At step **1470**, buyer sets parameters for the bot, as illustrated in exemplary form **U500** (FIG. 37). For instance, the buyer can specify, without limitation, the length of time for the bot to be active, the means of notification of the buyer, or whether or not the transaction can be made by the bot on the buyer’s behalf.

At step **1500**, the buyer can elect to see an analysis of final adjusted offers. The analysis is provided to help the buyer better understand the influence of priorities **20** on

adjusted offers **50**. It may be accessible via the “explain” button in form **U900** (FIG. 42), or in any other suitable way.

At step **1600**, analysis of adjusted offers is performed and displayed. In one embodiment, buyer’s monitor **A405** displays exemplary form **U1100** (FIG. 45), which shows adjusted offer **50** evaluated with respect to buyer’s priorities **20**. Optionally, or in another embodiment, buyer web server **A500** uses adjusted offers **50** and buyers priorities **20** to compute the critical factors that made a particular offer inferior to the highest-score offer. Yet, in another embodiment, buyer’s monitor **A405** displays a table that lists all attributes of the adjusted offers **50**, together with buyer’s priorities **20**, and explicitly shows how the scores were calculated.

At step **1620**, the buyer can request expert suggestions. The suggestions may be based on numerous factors, including, without limitation, results of product or service testing by independent third parties, recommendations of major magazines, or reputation points given by the other users of the present invention. It can also take the form of recommending a complementary product, as described earlier. For example, a buyer interested in a home theater system can be informed that most other people buying home theater systems also buy speaker stands.

At step **1640**, the actual suggestion is generated and displayed. In one embodiment, buyer web server **A500** queries third party database server **A1280** for results of testing, or for third party recommendations. It also queries buyer database server **A1220** to identify other products and/or services that are commonly purchased with the product or service returned in adjusted offers **50**. Typical results of a suggestion search are displayed in exemplary form **U1200** (FIG. 46) on buyer’s monitor **A405**.

At step **1700**, the buyer can make a decision to purchase. This can be done, for example, by clicking on a “buy me!” button in form **U900** (FIG. 42). Foregoing a

purchase makes buyer web server **A500** store buyer's RFO **10** for potential later use. The buyer may alternatively click a "talk to a rep" button in form **U900** (FIG. 42) to be connected, either telephonically or electronically to a seller representative, who could potentially answer questions in regards to the product or service in question.

At step **1800**, the transaction is executed. In the preferred embodiment, buyer web server **A500** receives buyer's billing information from buyer database server **A1220**, and relays it to buyer interface **A400** for confirmation. For example, form **U1000** (FIG. 44) may be shown on buyer's monitor **A405**, asking the buyer to either confirm or modify her billing and shipping information. Upon confirmation, purchase **30** is received by buyer web server **A500** and relayed to billing server **A1260** for further processing.

Billing server **A1260** sends purchase **30** to HTML data interface method server **A600**, or direct database access method server **A800** (possibly utilizing a proprietary standard), or to seller web server **A1000** depending on the seller's setup. Purchase **30** is then received, respectively, by seller website **A700**, seller database **A900**, or seller interface **A1100**. For example, a purchase notification mediated by seller web server **A1000** may look like that in form **U3500** (FIG. 59). Purchase announcement **70** notifies the winning seller that a transaction has been made on his behalf. Also, billing server **A1260** credits the seller's account, while applying agreed upon charges for a closed transaction.

In an alternative embodiment, if users of the present invention are not required to register but are required to perform the transaction in-situ, then step **1900** would consist of the buyer inputting billing and shipping information, with the rest of the process being the same as that described above.

In yet another embodiment, if buyers complete the transaction at the winning seller's website, then step **1900** would consist of buyer web server **A500** determining

which seller was chosen by the buyer, and instructing billing server **A1260** to charge that seller a success fee.

**FIG. 28** illustrates an exemplary embodiment of the process by which auction engine server **A1250** generates adjusted offers **50**. The process involves the use of buyer's RFO **10**, her priorities **20**, the sellers' business rules **60**, and a set of auction rules. The auction rules are preferably specified by the Auctioneer service provider, but can also be specified by the buyer or any other appropriate party. Optionally, third party information can be used in the auction process, as explained below.

At step **1210**, auction engine server **A1250** receives buyer's RFO **10** and her priorities **20** from buyer web server **A500**.

At step **1220**, auction engine server **A1250** queries seller rules database **A1240**, and obtains business rules from those affiliated sellers that could potentially satisfy RFO **10**. In addition, third party information can be requested from third party database server **A1280**. For example, ratings information from a third party service (e.g., Consumer Reports) can be obtained if the buyer has limited her choices to only those products or services that have received a favorable review from such a rating service. Furthermore, information from past users of the present invention can be obtained from buyer database **A1220**. For example, a list of products and services that have received fewer than 20 complaints from previous buyers using the Auctioneer can be obtained if the buyer has limited her choices to only those products or services that have not generated complaints by previous buyers. Simplified embodiments of the present invention need not include all of the various forms of information. Alternatively, auction engine **A1250** can just obtain the business rules of sellers who satisfy all restrictions imposed by the buyer. Auction engine **A1250** may also receive constraints imposed by the buyer on participating sellers, as specified in step **200**, or limitations on bidders and auction outcomes, as specified in step **1180**. Those steps are, however, not necessary. In another embodiment, the

restrictions may be applied by buyer web server **A500** after adjusted offers **50** have been generated, for example at step **1300**.

At step **1230**, the auction engine server **A1250** retrieves the auction rules previously stored on the auction engine server **A1250** by the Auctioneer service provider. Alternatively, the auction engine server **A1250** can receive auction rules specified by the buyer from buyer web server **A500**.

At step **1240**, initial offers **40** are evaluated according to buyer's priorities **20** and a best initial offer is determined. The evaluation may involve weighting initial offers **40** by linear weights constructed from buyer's priorities **20**. Many other weighting techniques are admissible, however, such as non-linear weighting, and need not be described in detail here.

At step **1250** an adjustment of seller offers is performed. Seller business rules **60** are used to modify initial offers **40**, or adjusted offers **50** made in a previous round. Seller business rules **60** can optionally respond based on information about the seller offers from the previous round. More thorough specification of seller business rules **60** is discussed below, with respect to FIGS. **29 – 30**.

At step **1260**, adjusted offers **50** of the present round are evaluated. In the preferred embodiment, the evaluation is identical to that in step **1240**. In alternative embodiments, however, it can be different. The evaluation may be used, for instance, to determine whether a seller's adjusted offer **50** is admissible. The criteria for admissibility of adjusted offer **50** are part of the auction rules, and can be very general.

At step **1270**, the status of the auction is compared with auction rules obtained in step **1230**. If auction rules indicate the auction has not reached an end, it continues to

loop. For example, an auction that ends when no seller makes an improving offer may loop several times.

At step **1275**, value-added product or services can optionally be added to affiliated or unaffiliated sellers' offers.

At step **1280**, the process on the auction engine server terminates, with final adjusted offers **50** being transmitted to buyer web server **A500**.

FIGS. **29** and **30** describe the process by which the seller creates and stores his business rules for the auction and obtains information, or analysis of information, generated by the present invention. It is assumed that the seller had established an Internet connection with seller web server **A1000**, through seller interface **A1100**. Any computer capable of running Internet browser software can be used to establish this connection.

At step **2000**, the seller signs in to seller web server **A1000** using seller interface **A1100**. The process of signing in involves the seller supplying any valid identification to access his account on seller rules database server **A1240**. The account on seller rules database server **A1240** had been previously created by the maintenance staff of the System, based on an affiliation agreement with the seller. The agreement can, for example, be reached using mail, email, fax, Internet form subscription, or any other means of communication capable of supporting legally binding agreements.

For cases in which the affiliation agreement is reached over the Internet, the seller may be presented with forms similar to **U2000** (FIG. **50**), **U2100** (FIG. **51**), and **U2200** (FIG. **52**). Form **U2000** (FIG. **50**) is an exemplary overview with links to sections discussing the rights and responsibilities accepted by the seller and the entity running the

present invention. Form **U2100** (FIG. 51) illustrates possible types of affiliation. As mentioned in the “Product and Pricing” section of the Background, the present invention generates proprietary information. Different types of affiliation grant access rights to different bundles of proprietary information. Form **U2200** (FIG. 52) succinctly summarizes exemplary types of information available under each type of affiliation. In a simpler embodiment of the present invention, all sellers could have identical access rights to the information.

At step **2100**, the seller chooses whether to view information generated, or mediated by the present invention. All affiliated sellers have access to auction results, such as that described as near-perfect information in the Background of the Invention. The information may range from that which is also readily available from other parties, to information that can be, in principle, obtained in the absence of the present invention (e.g. buyers’ needs, or priorities), to detailed information that is only generated by the present invention, listed, for instance, in the right column of form **U2200** (FIG. 52).

At step **2200**, the seller specifies the information to view, in a suitable form displayed on seller’s monitor **A1115**. This may include the area of products or services, the type of information, like RFOs **10**, or auction results **50**, the time period, and other constraints on requested records. Seller web server **A1000** automatically compares the seller’s request against his affiliation agreement obtained from seller rules database server **A1240**, and invalidates the request if the seller’s affiliation agreement prohibits access to the requested information. At step **2300**, seller web server **A1000** searches buyer database server **A1220**, or third party databases **A1280** and returns results as rules analysis **90** to the seller interface **A1100**. Forms like **U3000** (FIG. 55), **U3100** (FIG. 56), **U3200** (FIG. 57), **U3400** (FIG. 58) or **U3500** (FIG. 59) can be used to display information on individual transactions that occurred within the present invention. Exemplary forms **U3000** (FIG. 55) and **U3100** (FIG. 56) pertain to buyer’s information. Some of the buyer’s information may only be accessed with the buyer’s permission, e.g., in exchange for buyer loyalty program incentives (like frequent flier points). Forms

**U3200 (FIG. 57)** and **U3400 (FIG. 58)** pertain to records of actual offers generated by the present invention, while form **U3500 (FIG. 59)** displays the terms of the offer eventually accepted by the buyer. Form **U3600 (FIG. 60)** displays aggregate information about and analysis of auctions occurring during a certain time interval.

At step **2400**, the seller can decide to use his business rules **60** in a simulated environment, giving him the opportunity to test them prior to committing to use them. Using a simulated environment helps the seller discover whether his rules perform as intended.

At step **2500**, the seller enters his business rules **60** into forms like **U2300 (FIG. 53)** or **U2400 (FIG. 54)**. Form **U2300 (FIG. 53)** represents only an example of the way business rules **60** can be specified. These rules could also be driven by an electronic interface to another computer located on the seller's site which contains seller's own proprietary rule based system. Different sets of specifications can be allowed in different categories of products. Business rules **60** are sent by seller interface **A1100** to seller web server **A1000** and passed to seller rules database server **A1240**, however, they are marked "simulation-only" as they do not represent a binding commitment on the part of the seller.

At step **2600**, a simulation is run inside core network **A1200**. In one embodiment, auction engine **A1250** obtains the last *n* RFOs **10** and priorities **20** from buyer database server **A1220** falling within the category to which the business rules apply. Auction engine **A1250** then runs *n* auctions employing the seller's rules **60** against other sellers' rules. In a different embodiment, auction rules **60** are treated by auction engine **A1250** as valid rules, except the offers generated by them are not made visible to the buyer within returned adjusted offers **50**. After the simulation ends, seller rule **60** is invalidated by seller rule database server **A1240**.

At step 2700, auction engine server A1250 sends simulation results 70 to seller web server A1000 for further processing. Seller web server A1000 passes results 70, or their analysis to seller interface A1100 where they are displayed on seller video monitor A1115. The results may show basic aggregate information about how the sellers simulated rules compared to other sellers' rules in all dimensions, as in form U3600 (FIG. 60), or information on how many auctions were won, and what were the priorities profiles to which the simulated rule most appealed.

At step 2800, the seller can continue to experiment with his business rules in the simulation by changing the parameters.

At step 2900, the seller can modify his business rules 60 that he uses in actual (not simulated) auctions.

At step 3000, the affiliated seller enters or modifies seller business rules 60 in form U2300 (FIG. 53), in much the same way as in the simulated environment. The seller can adopt business rules that produced favorable results for him in a simulation. However, the modified rules do not have to be based on simulation results.

At step 3100, the seller decides to make new seller business rules 60 legally binding.

At step 3200, seller business rules 60 are sent to seller web server A1000 and permanently stored within seller rules database A1240 of core network A1200.

The various embodiments described above should be considered as merely illustrative of the present invention and not in limitation thereof. They are not intended to be exhaustive or to limit the invention to the forms disclosed. Those skilled in the art will

readily appreciate that still other variations and modifications may be practiced without departing from the general spirit of the invention set forth herein. Therefore, it is intended that the present invention be defined by the claims which follow:

**In the claims:**

**I. Please cancel claims 71, 72, and 73.**

**II. Please substitute rewritten claims 2, 3, 83, 95, 102, 105, 109, 110, and 111 for the pending claims with the same numbers as follows:**

2. (Once Amended) [The method of claim 1, further] A fully automated method of facilitating an electronic auction between a prospective buyer and a plurality of prospective sellers with near perfect information, comprising the steps of:
  - a) inputting into a computer a buyer's request for information about products or services;
  - b) finding information in response to the request for information;
  - c) communicating at least part of the information found to the buyer;
  - d) inputting into the computer a buyer's request for an offer;
  - e) communicating the request for an offer to at least two of the sellers;
  - f) receiving offers, including terms of sale in response to the request for an offer, from at least two of the sellers;
  - g) automatically generating rating information about seller offers based on a plurality of predetermined criteria;
  - h) communicating information regarding at least some of the seller offers to at least one other seller;
  - i) receiving an adjusted offer from at least one of the sellers during a specified auction period; and
  - j) communicating information regarding at least some of the seller offers and at least part of the rating information [found] to the buyer.
3. (Once Amended) The method of claim 2, wherein said request for an offer is inputted using an electronic template.

83. (Once Amended) [The method of claim 1, further comprising] A fully automated method of facilitating an electronic auction between a prospective buyer and a plurality of prospective sellers with near perfect information, comprising the steps of:
- a) inputting into a computer a buyer's request for an offer;
  - b) communicating the request for an offer to at least two of the sellers;
  - c) receiving offers, including terms of sale in response to the request for an offer, from at least two of the sellers;
  - d) automatically generating rating information about seller offers based on a plurality of predetermined criteria;
  - e) communicating information regarding at least some of the seller offers to at least one other seller;
  - f) receiving an adjusted offer from at least one of the sellers during a specified auction period;
  - g) communicating information regarding at least some of the seller offers and at least part of the rating information to the buyer; and
  - h) selling information about the auction.
95. (Once Amended) [The method of claim 1, further comprising] A fully automated method of facilitating an electronic auction between a prospective buyer and a plurality of prospective sellers with near perfect information, comprising the steps of:
- a) inputting into a computer a buyer's request for an offer;
  - b) communicating the request for an offer to at least two of the sellers;
  - c) receiving offers, including terms of sale in response to the request for an offer, from at least two of the sellers;
  - d) automatically generating rating information about seller offers based on a plurality of predetermined criteria;
  - e) communicating information regarding at least some of the seller offers to at least one other seller;

- f) receiving an adjusted offer from at least one of the sellers during a specified auction period;
  - g) communicating information regarding at least some of the seller offers and at least part of the rating information to the buyer; and
  - h) selling information about the buyer.
102. (Once Amended) The method of claim 1, further comprising completing [the] an electronic transaction at an electronic site that was also used for the buyer's auction.
105. (Once Amended) The method of claim 1, further comprising completing [the] an electronic transaction at an electronic site representing one of the sellers.
109. (Once Amended) The method of claim 1, wherein the step of communicating information regarding at least some of the seller offers [and at least part of the rating information] to at least one [of the] other seller[s] occurs before the step of receiving an adjusted offer.
110. (Once Amended) The method of claim 1, wherein the step of communicating information regarding at least some of the seller offers [and at least part of the rating information] to at least one [of the] other seller[s] occurs after the step of receiving an adjusted offer.
111. (Once Amended) The method of claim 1, wherein the step of communicating information regarding at least some of the seller offers [and at least part of the rating information] to at least one [of the] other seller[s] occurs both before and after the step of receiving an adjusted offer.

## REMARKS

### A. Objection to the disclosure

The Detailed Description has been amended to link Figures 31-60 with the corresponding user interfaces **U100 – U3600** by putting the figure number after the user interface number in the Detailed Description, e.g., “**U100 (FIG. 31).**” Figures 31-60 have been described in the Brief Description of the Figures to show their pertinence to the invention. Support for these amendments is found in Figures 31-60 and pages 75-96 of the Detailed Description. No new matter has been added.

### B. Objections to claims 2-6, 34-36 and 83-100 under 37 CFR 1.75(c)

In a phone call with the Examiner on November 21, 2002, Examiner Patel stated that the inclusion of claims 34-36 in this objection was a typographical error. Thus, claims 34-36 remain unchanged because there was no objection under 37 CFR 1.75(c) to claims 34-36.

Applicants respectfully disagree with the Examiner's objection that claims 2-6 and 83-100 do not further limit parent claim 1 because these claims have no relationship to the invention recited in claim 1. Applicants disagree because the method recited in claim 1 concerns more than just the auction period itself. Rather, the method recited in claim 1 is a set of steps that facilitates an auction with near perfect information. Dependent claims 2-6 and 83-100 list additional steps that further limit the method of facilitating an auction with near perfect information recited in claim 1.

Nevertheless, Applicants have rewritten claims 2, 83, and 95 in independent form because the Examiner has stated that this will remove the objection (“Applicant is required to cancel the claim(s), or . . . rewrite the claim(s) in independent form.” page 2 of the Office Action, emphasis in original). No new matter has been added. These are purely cosmetic changes that do not narrow the scope of these claims.

**C. Rejection of claims 34-36, 38-46, 52-56, 71-75, 102-105, and 109-111 under 35 U.S.C. 112 ¶2**

In a phone call with the Examiner on November 21, 2002, Examiner Patel concluded that there was, in fact, proper antecedent basis for claims 34-36, 38-46, 52-56, and 74-75. Thus, these claims remain unchanged because there is no longer a rejection under 35 U.S.C. 112 ¶2 of these claims.

Claims 71-73 have been cancelled.

Claims 102, 105, and 109-111 have been amended to overcome the rejection under 35 U.S.C. 112 ¶2 of claims 102-105 and 109-111. No new matter has been added.

**D. Rejection of claims 1, 7-15, 18-29, 30-33, 37-39, 47-51, 53, 62-70, 74, 76-82, 101 and 112 under 35 U.S.C. 103(a) as being unpatentable over Alaia in view of Gindlesperger**

In a telephone interview on November 12, 2002, we explained to Examiner Patel that claim element 1(d), i.e.,

- d) automatically generating rating information about seller offers based on a plurality of predetermined criteria;

is not taught by Gindlesperger.

Instead, Gindlesperger concerns a system for deciding which sellers receive RFQs to begin with, i.e., the system prequalifies sellers. Sellers' offers (bids) are not rated based on a plurality of criteria in Gindlesperger. Rather, the lowest bid wins.

These facts are explained at several places in Gindlesperger, including 1) the Abstract; 2) column 5, lines 1-25; and 3) Figure 1, steps 12 –22:

[A] vendor's invitation to bid is transmitted to the vendors from among those approved by the buyer associated with the buyer's invitation for bid having a vendor capability data meeting the calculated vendor requirements. Responding bids from the vendors are input into the database and ranked in order of price. The lowest price bid is identified ...

*Abstract*

... receiving at the PrintProSys<sup>SM</sup> server a buyer's invitation-for-bid describing a customized print or other information product or service that the buyer wishes to procure or obtain bids for, calculating or extracting a vendor selection criteria data from the buyer's invitation-for-bid, the vendor selection criteria data defining the values that a vendor's capability data must meet to qualify for, and to receive, a vendor's invitation-for-bid requesting a bid response corresponding to the buyer's invitation-for-bid.

The method of the present invention then compares and correlates the vendor selection criteria data to the vendor capability data field of each vendor data record in the buyer's vendor pool database. The PrintProSys<sup>SM</sup> server then transmits a vendor's invitation-for-bid data to each vendor in the buyer's vendor pool whose vendor capability data field meets the vendor selection criteria data extracted from the buyer's invitation-for-bid data. Next, the PrintProSys<sup>SM</sup> server receives a plurality of responding bid data, each being from a corresponding one of the plurality of vendors to whom a vendor invitation-for-bid data was transmitted, and each representing the transmitting vendor's price for the particular print information goods or services requested. The PrintProSys<sup>SM</sup> server then selects the responding bid data having the lowest represented vendor price ...  
*column 5, lines 1-25*

DETECT LOW BID  $B_i$  ... *Figure 1, step 20*

Thus, because Gindlesperger fails to teach claim element 1(d), Claim 1 (and all of its dependent claims) cannot be made obvious by Alaia in view of Gindlesperger.

In the phone interview, the Examiner agreed that Gindlesperger does not teach claim element 1(d) for the reasons just described. Thus, the Examiner agreed to withdraw all of the present 103(a) rejections because all of these rejections rely on Gindlesperger to teach claim element 1(d). The Examiner indicated, however, that he may make new 103(a) rejections based on prior art other than Gindlesperger in another non-final office action.

**E. Rejection of claims 2-6, 34-36, 107, and 108 under 35 U.S.C. 103(a) as being unpatentable over Alaia in view of Gindlesperger and Walker**

As explained in Remarks Section D. above, the Examiner has agreed to withdraw all of the present 103(a) rejections.

**F. Rejection of claims 16 and 17 under 35 U.S.C. 103(a) as being unpatentable over Alaia in view of Gindlesperger and Chen**

As explained in Remarks Section D. above, the Examiner has agreed to withdraw all of the present 103(a) rejections.

**G. Rejection of claims 57-61 and 106 under 35 U.S.C. 103(a) as being unpatentable over Alaia in view of Gindlesperger and Mori**

As explained in Remarks Section D. above, the Examiner has agreed to withdraw all of the present 103(a) rejections.

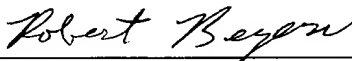
**CONCLUSION**

In light of the foregoing, the objections and rejections in the Office Action dated July 5, 2002 are believed to be traversed, and Applicants request that the objections and rejections be withdrawn and the claims be passed to allowance.

If the Examiner believes a discussion of the above would be useful, he is invited to call the Applicants' attorney, Dr. Robert Beyers, at (650) 470-4624.

Respectfully submitted,

Date: December 5, 2002

  
Robert Beyers, Ph.D.  
Reg. No. 46,552

SKADDEN, ARPS, SLATE, MEAGHER & FLOM LLP  
525 University Avenue  
Palo Alto, California 94301